

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of producing oligodendrocytes from mammalian multipotent neural stem cells, comprising:

providing a cell culture of multipotent neural stem cells obtained from neural tissue;

contacting the multipotent neural stem cells ~~derived from neural tissue~~ with an effective amount of at least one oligodendrocyte promoting factor under conditions that result in production of oligodendrocytes from the multipotent neural stem cells,

wherein the oligodendrocyte promoting factor is selected from the group consisting of granulocyte-macrophage colony stimulating factor (GM-CSF), interleukin 3 (IL-3) and interleukin 5 (IL-5).

2. to 5. (Cancelled)

6. (Currently Amended) The method of claim 1 [[5]] wherein the cell culture is prepared using mammalian brain tissue.

7. (Original) The method of claim 6 wherein the mammalian brain tissue is obtained from a non embryonic mammal.

8. (Original) The method of claim 6 wherein the mammalian brain tissue is obtained from an adult mammal.

9. (Original) The method of claim 6 wherein the brain tissue is obtained from the subventricular zone.

10. to 40. (Cancelled)